



SEQUENCE LISTING

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Engelhard, Victor H.

<120> HA-1 epitopes and uses thereof

<130> 2183-6047US

<140> 10/623,176

<141> 2003-07-18

<150> 09/489,760

<151> 2000-01-21

<150> EP 97202303.0

<151> 1997-07-23

<150> PCT/NL98/00424

<151> 1998-07-23

<150> JP 2000-504165

<151> 2000-01-24

<160> 101

<170> PatentIn Ver. 2.1

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wherein X can be R or H

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capable of binding HLA-A2.1

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peptide candidate m/z 513 wherein X can be L or I

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Val Leu Xaa Asp Asp Leu Leu Glu Ala Arg

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<210> 28

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 reverse primer

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Arg

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<210> 35

<211> 9

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 1 5

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 <210> 38
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5

<210> 40

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5

<210> 41

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 1 5 10 15

 Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly Glu Ala
 20 25

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 Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu
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 <222> (1)..(27)

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 1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly
20 25

<210> 52
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His Asp Asp Leu Leu Glu Ala Arg Arg Pro Arg Ala His Glu Cys Leu
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Gly Glu Ala

<210> 53
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Ala Arg Arg Pro Arg Ala
20

<210> 54
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<210> 55

<211> 25

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1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys
20 25

<210> 56

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<222> (1)..(12)

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<210> 57

<211> 17

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<222> (1)..(17)

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Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu Glu
 1 5 10 15

Ala

<210> 58
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<220>
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 Gly Leu Glu Lys Leu Lys Glu Cys Val Leu
 1 5 10

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<220>
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 long HA-1 peptide

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 <222> (1)..(29)

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 1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly Glu Ala
 20 25

<210> 60
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1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly
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<220>
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1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly Glu
20 25

<210> 62
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<222> (1)..(14)

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 1 5 10 15

Ala Arg Arg Pro Arg Ala
 20

<210> 64
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 1 5 10

<210> 65
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<220>
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 1 5 10

<210> 66
 <211> 26
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<220>
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<220>
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 Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu

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Ala	Arg	Arg	Pro
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		Glu	Cys
		Leu	
	20	25	

<210> 67
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1				5					10					15	

Ala	Arg	Arg	Pro	Arg	Ala	His	Glu	Cys
			20				25	

<210> 68
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<220>
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<220>
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<400> 68											
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<220>
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<400> 69

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Ala

<210> 70
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<220>
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Ala Arg Arg

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<220>
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 <222> (1)..(21)

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 1 5 10 15

Ala Arg Arg Pro Arg
 20

<210> 72
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<220>

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 <400> 72
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 1 5 10 15

 Ala Arg Arg Pro Arg Ala His
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 <210> 73
 <211> 38
 <212> DNA
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 sequence derived from a presumed HA-1 negative
 individual

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 <210> 74
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 sequence derived from a presumed HA-1 negative
 individual

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 <222> (1)..(13)

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 1 5 10

 <210> 75
 <211> 38
 <212> DNA
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 <220>
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 sequence derived from a presumed HA-1 homozygous
 positive individual

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 <222> (1)..(38)

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<210> 76
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 sequence derived from a presumed HA-1 homozygous
 positive individual

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 Glu Cys Val Leu His Asp Asp Leu Leu Glu Ala Arg Arg
 1 5 10

<210> 77
 <211> 9
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<220>
 <223> Description of Artificial Sequence: HA-1 peptide

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<400> 77
 Tyr Ile Gly Glu Val Leu Val Ser Val
 1 5

<210> 78
 <211> 29
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: a 29 amino acid long HA-1A peptide

<400> 78

 Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu Glu
 1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly Glu Ala
20 25

<210> 79
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<212> PRT
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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1A peptide

<400> 79

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu
1 5 10

<210> 80
<211> 27
<212> PRT
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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1A peptide

<400> 80

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1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly
20 25

<210> 81
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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1A peptide

<400> 81

His Asp Asp Leu Leu Glu Ala Arg Arg Pro Arg Ala His Glu Cys Leu
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Gly Glu Ala

<210> 82
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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1A peptide

<400> 82

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu Glu
1 5 10 15

Ala Arg Arg Pro Arg Ala
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<210> 83
<211> 13
<212> PRT
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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1A peptide

<400> 83

Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu
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<210> 84
<211> 25
<212> PRT
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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1A peptide

<400> 84

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu Glu
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys
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<210> 85
<211> 12
<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1A peptide

<400> 85

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp
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<210> 86

<211> 17

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1A peptide

<400> 86

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu Glu
1 5 10 15

Ala

<210> 87

<211> 10

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1A peptide

<400> 87

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu
1 5 10

<210> 88

<211> 29

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: a 29 amino acid long HA-1R peptide

<400> 88

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly Glu Ala
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<210> 89
<211> 27
<212> PRT
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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1R peptide

<400> 89

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly
20 25

<210> 90
<211> 28
<212> PRT
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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1R peptide

<400> 90

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly Glu
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<210> 91
<211> 14
<212> PRT
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<400> 91

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu
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<210> 92
<211> 22
<212> PRT
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<400> 92

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu
1 5 10 15

Ala Arg Arg Pro Arg Ala
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<210> 93
<211> 13
<212> PRT
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<220>
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<400> 93

Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu
1 5 10

<210> 94
<211> 12
<212> PRT
<213> Artificial Sequence

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<400> 94

Cys Val Leu Arg Asp Asp Leu Leu Glu Ala Arg Arg
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<210> 95
<211> 26
<212> PRT
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1R peptide

<400> 95

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu
20 25

<210> 96

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1R peptide

<400> 96

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys
20 25

<210> 97

<211> 12

<212> PRT

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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1R peptide

<400> 97

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp
1 5 10

<210> 98

<211> 17

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1R peptide

<400> 98

Gly	Leu	Glu	Lys	Leu	Lys	Glu	Cys	Val	Leu	Arg	Asp	Asp	Leu	Leu	Glu
1				5					10					15	

Ala

<210> 99
 <211> 19
 <212> PRT
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 <223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1R peptide

<400> 99

Gly	Leu	Glu	Lys	Leu	Lys	Glu	Cys	Val	Leu	Arg	Asp	Asp	Leu	Leu	Glu
1				5					10					15	

Ala Arg Arg

<210> 100
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 <212> PRT
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<400> 100

Gly	Leu	Glu	Lys	Leu	Lys	Glu	Cys	Val	Leu	Arg	Asp	Asp	Leu	Leu	Glu
1				5					10					15	

Ala Arg Arg Pro Arg
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<210> 101
 <211> 23
 <212> PRT
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<220>
 <223> Description of Artificial Sequence: in vitro proteasomal cleavage of a 29 amino acid long HA-1R peptide

<400> 101

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu
1 5 10 15

Ala Arg Arg Pro Arg Ala His
20